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AIR PROTECTION BRANCH

January 19, 2012

Mr. Eric Cornwell  
Georgia Environmental Protection Division  
Air Protection Branch  
4244 International Parkway, Suite 120  
Atlanta, Georgia 30354

RE: PyraMax Ceramics, LLC – Wrens, Georgia – Draft Permit No. 3295-163-0035-P-01-0  
Draft Permit Comments

Dear Mr. Cornwell:

Trinity Consultants (Trinity), on behalf of our client PyraMax Ceramics, LLC (PyraMax), is providing written comments to Draft Permit No. 3295-163-0035-P-01-0. The following is a summary of the specific permit conditions, and the requested changes.

1. Condition 2.2.1: *The Permittee shall implement measures, including fencing, sign postings, and routine patrols to restrict public access along the entire Source Boundary utilized in the ambient impact assessment/modeling. Signs shall be posted along the property boundary no further than 100 feet apart, and patrols shall be conducted at least once weekly on boundaries that have public access. The Permittee shall maintain a written plan outlining such measures, and shall be updated as required. The Division reserves the right to require enhancement of the plan.*  
[40 CFR 52.21]

The current plan calls for fencing around the entire property boundary, consistent with those property boundaries as utilized in the facility air dispersion modeling assessments. Therefore, this condition is unnecessary, and PyraMax requests removal of this permit condition. As an alternative, the permit condition could be modified to the following;

*The Permittee shall implement measures, including fencing, sign postings, or routine patrols to restrict public access along the entire Source Boundary utilized in the ambient impact assessment/modeling. Signs shall be posted along the property boundary no further than 100 feet apart, and patrols shall be conducted at least once weekly on boundaries that have public access at which fencing is not provided. The Permittee shall maintain a written plan outlining such measures, and shall be updated as required. The Division reserves the right to require enhancement of the plan.*

2. General Typographical Errors in Condition 3.1

General typographical errors within Condition 3.1 that should be corrected include the following;

- a. There is no Permit Section 3.2. However, equipment within the pelletizer grouping (i.e. PEL1) reference permit conditions in Section 3.2.
- b. Section 3.3.8, for NSPS Subpart UUU, is referenced for various equipment within Table 3.1, for equipment for which that rule is not applicable (i.e. ADS1).
- c. The boilers (B1, B2) reference Condition 3.3.21, which refers to the emergency engines. This condition reference should be stricken.

3. Permit Condition 5.2.10

Permit Condition 5.2.10(g), and 5.2.10(h) require the same information be recorded for the emergency diesel generators. It is recommended that Condition 5.2.10(h) be removed.

4. Permit Condition 5.2.2: *The Permittee shall install a device to continuously monitor the temperature at the inlets of baghouses that receive gases at a temperature higher than ambient air, and record the time and date of each incident when the temperature exceeds the fabric filter bag design temperature. In lieu of monitoring temperature at the baghouse inlet, the Permittee may monitor a surrogate temperature (e.g., clay temperature or dryer/pelletizer outlet temperature). For each baghouse monitored by a surrogate temperature, the Permittee shall determine the equivalent fabric filter bag design temperature and record each incident when the surrogate temperature exceeds the equivalent fabric filter bag design temperature. The Permittee shall record the fabric filter bag design temperature or the equivalent filter bag design temperature for each fabric baghouse listed. Such records and any supporting calculations shall be made available for inspection.*  
[391-3-1-.02(6)(b)1 and 40 CFR 52.21- PSD/BACT]

It is requested, for clarification, that the text of the permit condition provided above be modified as follows, as the indicated baghouse equipment references are those baghouses expected to operate at temperatures above that of ambient air.

*The Permittee shall install a device to continuously monitor the temperature at the inlets of baghouses that receive gases at a temperature higher than ambient air (BHP1, BHP2, BHK1, BHK2)...*

5. Permit Condition 3.3.13: *The Permittee shall operate each calciner/kiln such that the temperature at the inlet of the "catalytic baghouse" serving the calciner/kiln remains at or greater than that established during the most recent Division-approved performance test but below 750°F.*  
[40 CFR 52.21 - PSD/BACT]

It is requested that the PSD/BACT citation be removed, and a general Georgia citation be provided, as this operating limit condition does not directly apply to BACT.

6. Permit Condition 3.3.12

- a. The compliance method reference for each calciner/kiln for VOC emissions (emission limit 0.54 lb/hr) should be modified to Method 25, 3 hours. The current method listed for VOC emissions is a mass balance approach, which is not viable for the kilns.
- b. The condensable Particulate Matter (PM) reference for Method 202 should be removed from the operation "Each of the emission units with baghouse control excluding spray dryers/pelletizers and calciners/kilns" and added to "Each spray dryer/pelletizer".

7. Permit Condition References To Sodium Bicarbonate

It is requested that the term "sodium bicarbonate" be replaced with the term "sorbent" in the following permit conditions.

- a. Condition 3.1 (i.e. Sodium Bicarbonate Silo to Sorbent Silo).
- b. Condition 3.3.2(d)
- c. Condition 3.3.15
- d. Condition 4.2.11(b)
- e. Condition 4.2.12(b)
- f. Condition 5.2.10(c)
- g. Condition 6.1.7(c)(vi)
- h. Condition 6.2.16

8. Condition 6.2.14 and 6.2.15

Conditions 6.2.14 and 6.2.15 require daily sampling and analysis of the clay sulfur content of each calciner/kiln feed and each kiln product stream, and use of that data to compute a daily averaged hourly post control SO<sub>2</sub> emissions rate for each calciner/kiln. PyraMax requests that these conditions be modified to require weekly sampling, analysis, and computation of emissions. Also, it is requested that clarification be provided, if necessary, regarding the percent by weight sulfur content of materials as specified in Condition 6.2.15 (i.e. dry weight basis).

9. Condition 6.2.16

Condition 6.2.16 involves determination of the current sodium bicarbonate and ammonia injection rates for the kiln emissions control systems. This condition is tied into excursions, as defined in Condition 6.1.7(c). For example, excursions are defined as "each instance that the recorded sodium bicarbonate injection rate (1-hour block average) dropped more than 5% below the current injection rate as determined per Condition 6.2.16." The interaction of these permit conditions would mean that the value which would determine excursions would be changing constantly based on the frequency of sampling of the clay sulfur content, as well as the frequency of monitoring of NO<sub>x</sub> emissions. This would make continuing compliance with excursion conditions difficult.

In lieu of Permit Condition 6.2.16, PyraMax would propose establishment of the appropriate sodium bicarbonate and ammonia injection rates during initial and periodic compliance testing of the facility kilns, to define those values for which an excursion would be established. Also, if this request is granted by EPD PyraMax would also request removal of monitoring the NO<sub>x</sub> emissions "before" each catalytic baghouse as described in Condition 5.2.8, as that requirement would now no longer be necessary for gathering data for Condition 6.2.16.

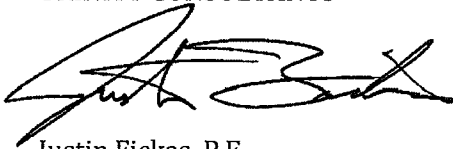
10. Use of the Term Spray Dryers/Pelletizers

PyraMax would request that the terminology within the draft permit regarding spray dryers/pelletizers be modified to pelletizers in the final permit.

Please do not hesitate to contact me at (678) 441-9977 for any questions or comments concerning this submittal.

Sincerely,

TRINITY CONSULTANTS



Justin Fickas, P.E.  
Managing Consultant

Enclosures

cc: Don Anschutz (PyraMax)  
Tom Muscenti (Trinity)  
Susan Jenkins (EPD)  
Hamid Yavari (EPD)  
Wei-Wei Qui (EPD)